

What is claimed is:

- 1 1. A semiconductor cooling device comprising:
 - 2 a cold plate for cooling a semiconductor element;
 - 3 a condenser; and
 - 4 a positive-displacement refrigerant pump, said cold plate, condenser
 - 5 and refrigerant pump being fluid connected in series with each other to define a
 - 6 refrigerating cycle.
- 1 2. A semiconductor cooling device comprising:
 - 2 a cold plate for cooling a semiconductor element;
 - 3 a condenser;
 - 4 a receiver tank; and
 - 5 a centrifugal refrigerant pump, said cold plate, condenser, receiver tank
 - 6 and refrigerant pump being fluid connected in series with each other to define a
 - 7 refrigerating cycle.